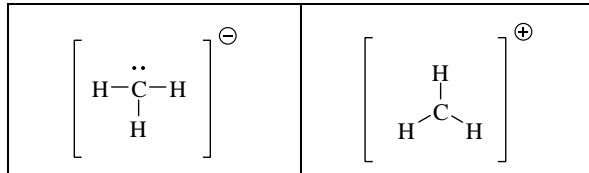


**CHEM1108 Chemistry 1A (Life Sciences) - June 2007****2007-J-2**

- 

	carbon dioxide	+IV	0
	sodium chromate	+VI	0
	iron(III) chloride-3-water	+III	5
K <sub>2</sub> SO <sub>4</sub>			

- 

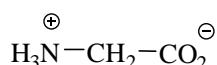


CH<sub>3</sub><sup>-</sup> will be more stable as it has a full octet of electrons

- 1.45 g

**2007-J-3**

- 



C1 (terminal C)	$sp^2$	trigonal planar
C2 (middle C)	$sp^3$	tetrahedral
N	$sp^3$	tetrahedral

Major intermolecular force is ionic bonding between the positively and negatively charged ends of the molecule.

- 13.6 kg

**2007-J-4**

- 

$$0.386 \text{ g}$$

$$0.0444 \text{ M}$$

$$0.133 \text{ M}$$

**2007-J-5**

•

	$\text{1. NaBH}_4$ $\text{2. H}^+ / \text{H}_2\text{O}$	
	dilute $\text{H}_2\text{SO}_4$ / heat	2-butanol
	$\text{Cr}_2\text{O}_7^{2-} / \text{H}^+$	3-methylcyclohexanone
propyl acetate	3 M NaOH / heat	$\text{CH}_3\text{CO}_2^- + \text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$
▼		$\text{CH}_3\text{CO}_2^- + \text{H}_3\text{C}-\overset{\text{O}}{\underset{\text{  }}{\text{C}}}-\text{NH}-\text{CH}_2\text{CH}_3$

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Name:

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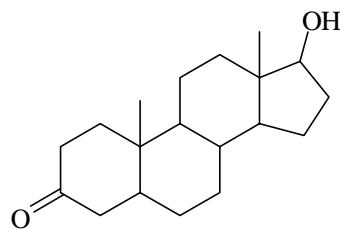
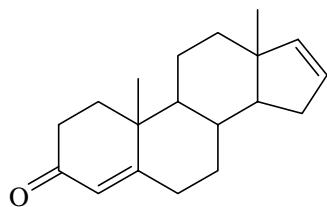
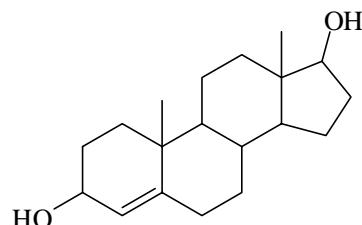
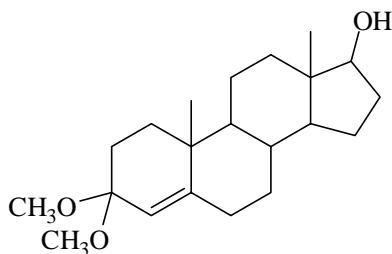
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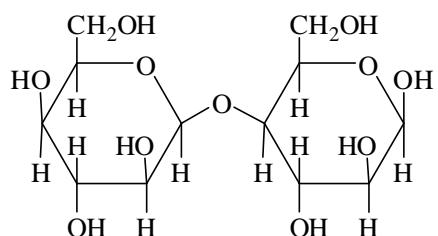
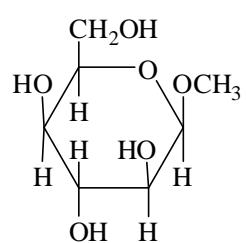
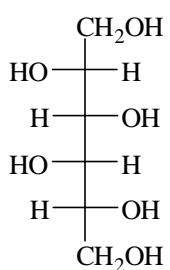
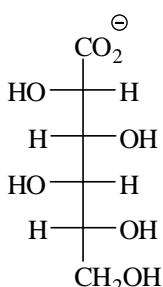
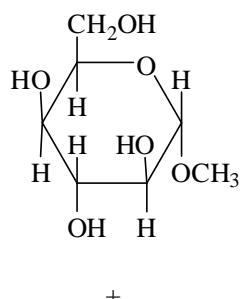
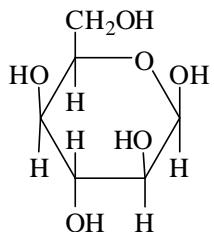
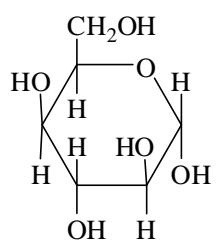
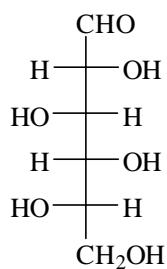
$\text{C}_{19}\text{H}_{28}\text{O}_2$   
ketone, alkene, alcohol (secondary)

6



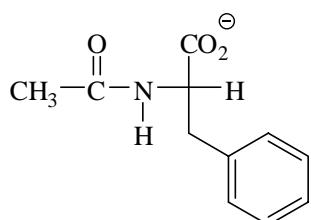
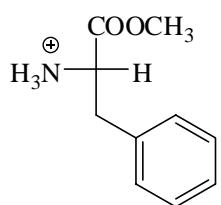
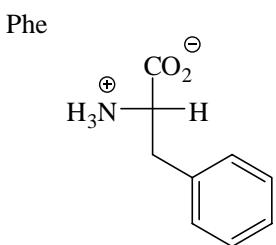
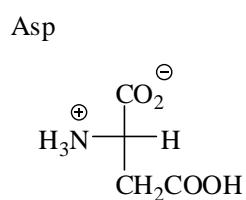
2007-J-7

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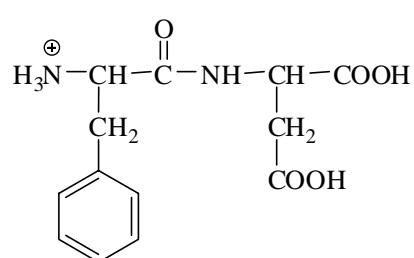


2007-J-8

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pH 1.0



pH 12.0

